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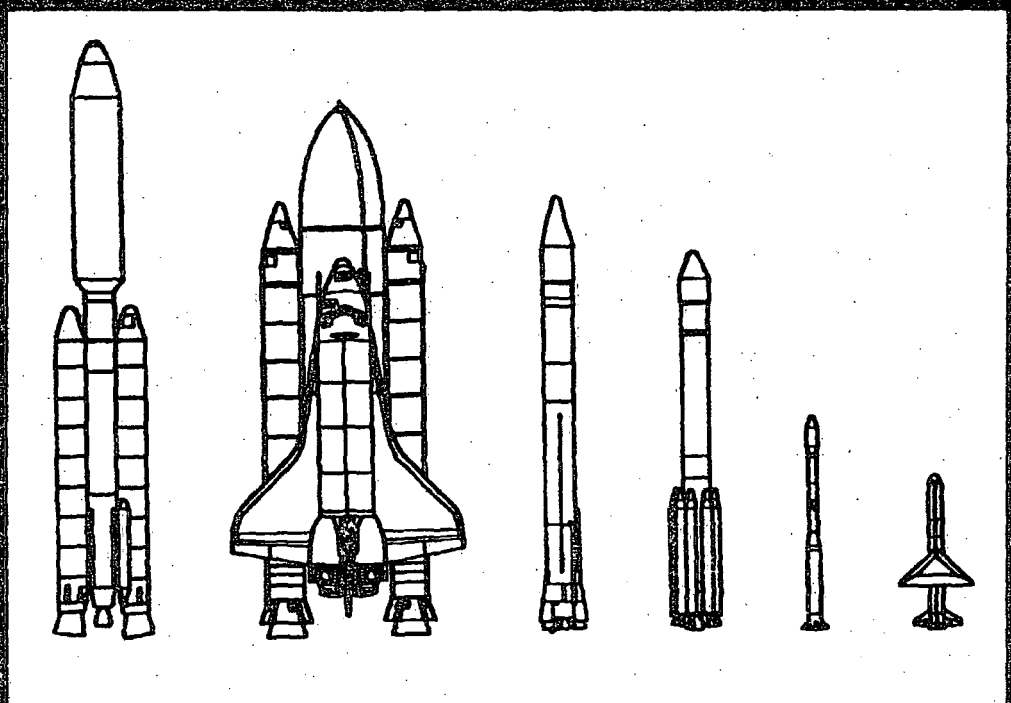
STRATEGIC ARMS REDUCTION TALKS (START):

IMPACT ASSESSMENT FOR SPACE LAUNCH OPERATIONS

JUNE 1991



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PURPOSE OF BRIEFING

- Provide an overview of the START issues:
  - Declared Facility Inspections
  - Challenge Suspect Site Inspections
  - Data Denial
  - Accountable Boosters
- Examine the impact of START on NRO associated space launch operations

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NRO PHILOSOPHY

Goal

- Maintain clear distinction between ballistic missile and space launch infrastructures
- Preclude Soviet inspection of sensitive facilities or impacts on space launch schedules

Reality

- Launch bases and declared facilities are collocated/mixed
- Soviet concerns with U.S. space launch operations/SDI
- DOD wants to use accountable boosters for space launch
- State/ACDA/IC want *more* verification

Results

- Manageable impacts to space launch operations

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DECLARED FACILITY INSPECTIONS (ARTICLE XI)

"Data Update" inspections allowed to look for accountable missile stages

- Maximum 9 HRS warning, "Freeze" on large vehicles
- Inspect declared areas only
- Must declare number/location of accountable stages
- Surrounding roads *not* captured (currently)
- Inspection period 24 hours or less
- No more than 15/year

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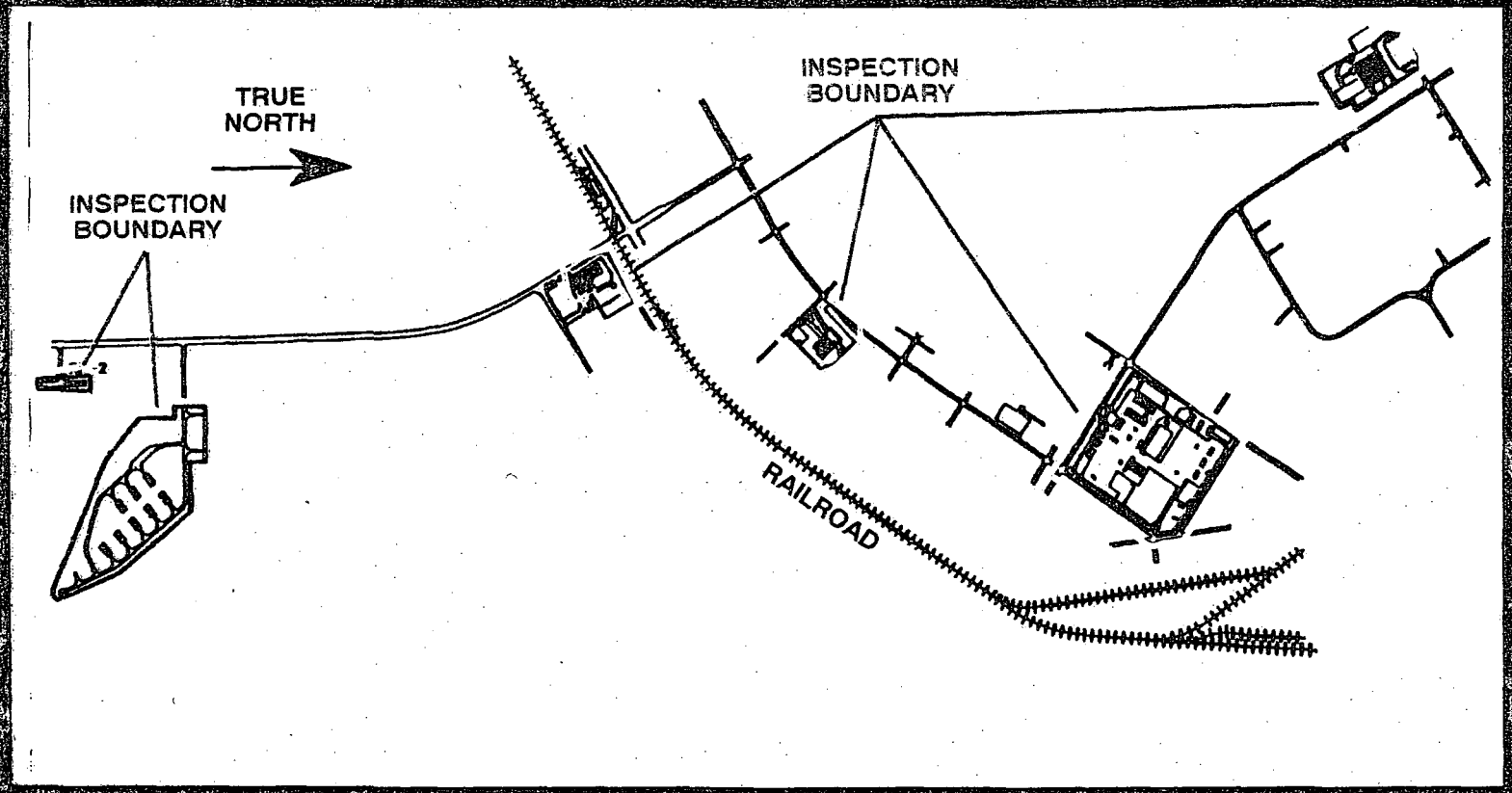
DECLARED FACILITIES AT VANDENBERG



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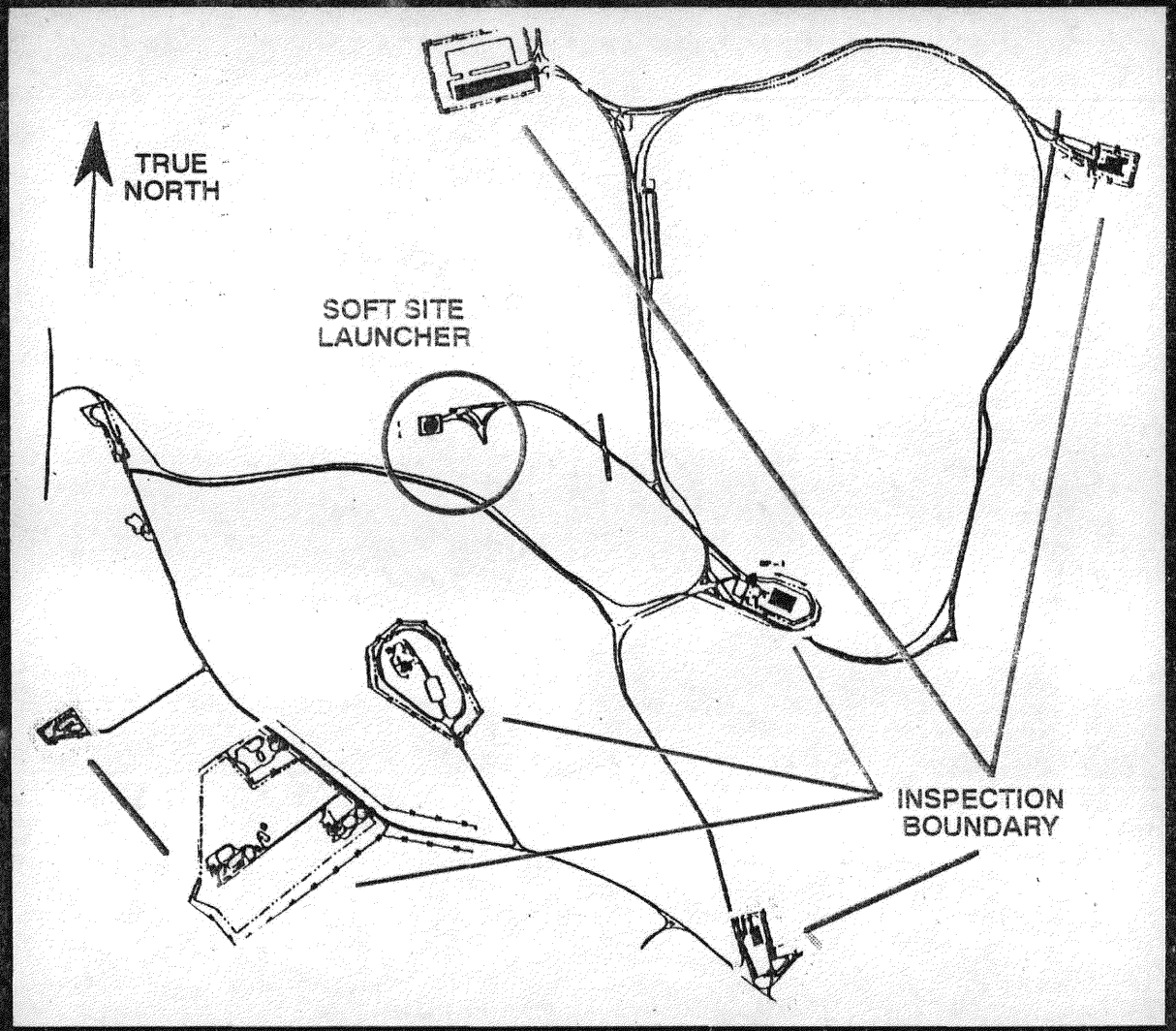

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SUSPECT SITE INSPECTIONS

Mandatory

- Soviets have proposed [redacted] inspections in return for 5 Soviet sites
- U.S. proposal allows a total of 15 suspect site inspections per year including mandatory sites

Challenge

- Either party can request a challenge inspection at any undeclared facility or location (b)(1) (b)(3)
- Soviets are proposing that right of refusal inspections be dropped and all requests for challenge inspections be moved directly to JCIC – U.S. is likely to agree

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CHALLENGE INSPECTIONS: IMPACTS AND NEXT STEPS

Impacts

- Probably minimal for space launch, but must do homework
- Safeguards are available by delaying and if necessary refusing challenge inspection
  - Will require some advance preparations

Next steps

- Refine policy on refusals
- Develop flexible, timely reaction procedures
  - Interagency notification mechanisms unclear

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DATA DENIAL
(ARTICLE X)

- The treaty requires producing and broadcasting ballistic missile telemetry
- Prohibited
  - Encryption, encapsulation, jamming, low power levels, directional beaming
  - "Any practice that denies full access" to a telemetric information broadcast during flight test
- Negotiations in flux
- Does not apply to objects in orbit or *pure (generic)* space launch vehicles (SLVs)

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DATA DENIAL (CONT)

Systems affected	*Systems possibly affected*	*Systems not affected*
All ICBMs/SLBMs flight tested	Titan II (unlikely)	Titan III/IV
	Atlas E (unlikely)	Atlas I/II
	Taurus (possible if using PK, 1st stage)	Delta
		Shuttle
		Pegasus

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ACCOUNTABLE BOOSTERS USED FOR SPACE LAUNCH VEHICLES

Accountable ICBMs/SLBMs include . . .

- Largest stage only (2nd and 3rd excluded)
- Deployed or nondeployed (active inventory)
- Retired types
- Former types (only if declared in treaty)
  - MM I
  - A-3

All systems subject to numerical, location, inspection, and reporting requirements

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LOCATIONAL PROVISIONS/ RESTRICTIONS

- Accountable ICBMs/SLBMs always subject to inspections
  - Except at space launch facilities
- A facility storing accountable stages converted to space launch
  - Must be declared
  - Would be inspectable (baseline, data update, etc)

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NUMERICAL LIMITS

- Limit of 20 ICBMs/SLBMs at SLFs at any one time
- Only NDM-limited systems have a numerical limit (250/125)
  - For the U.S., this affects the Peacekeeper
  - The limit applies even if transferred to industry
- Silo-based ICBMs and all SLBMs not subject to NDM-limits
  - MM II/III, C-3, C-4, D-5

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MOBILE SPACE LAUNCH ISSUES
(15 MAY 91)

Differences between SLV and ballistic missiles must be clear and unambiguous. Measures designed by the parties must not hamper US military and civilian space launch operations.

Proposed Agreed Statement:

- Cannot intermix space/missile systems
- "Normal" space launch requirements
- Movable launch platform *not* mobile launchers
- Launches conducted from any location except rail/road mobile ICBM base

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KEY ISSUES NOT YET COMPLETED

- Mobile space launch issues
  - Allow mobile launchers, either generic or converted?
  - Allow use of nonmobile ICBMs/SLBMs with mobile launchers?
  - Definitional problems
- Distinguishability criteria
  - How different must a generic SLV be from an ICBM or SLBM?
- Some danger that declared facility roads would be captured

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NON-DEPLOYED MISSILES

DEPLOYED/ACTIVE

NDM STORAGE

MISSILE PRODUCTION FACILITY
- PK
- TAURUS

START SPACE LAUNCH FACILITY (SSLF)
- DECLARED SITE
- SITE DIAGRAM
- NOT INSPECTABLE
- PRE-NOTIFICATION OF LAUNCH
- LIMIT ON NUMBERS OF MISSILES

SPACE LAUNCH STORAGE FACILITY (SLSF)
- DECLARED SITE
- INSPECTABLE
- SITE DIAGRAMS
- NOTIFICATIONS

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PK 1ST STAGE DEPLOYMENT (TAURUS STAGE 0)

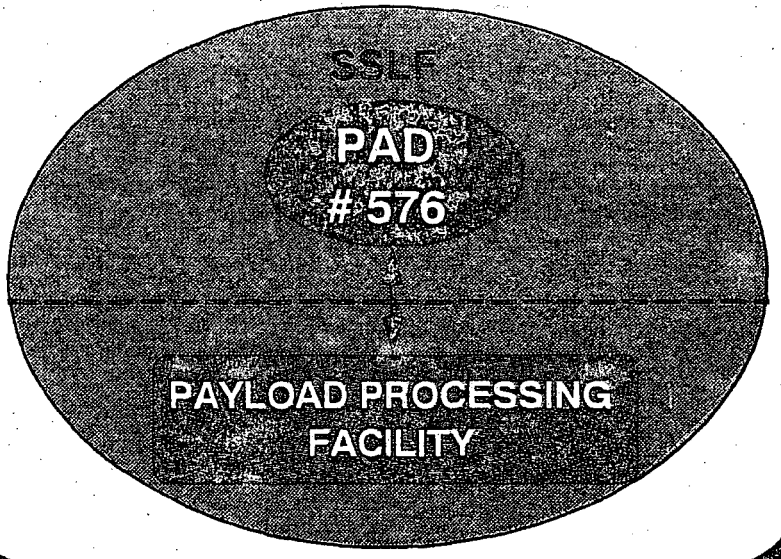
MISSILE PRODUCTION FACILITY

- PK (1st STAGE)
- TAURUS (STAGE 0)

PEGASUS

STAGE 1	STAGE 2	STAGE 3	&	PAY LOAD

VANDENBERG AFB



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START POLITICAL ASSESSMENT

- President directed START completion in early 1991
  - Delayed by CFE problems, Soviet political situation, Gulf war
  - Nothing is agreed until all is agreed
- Signing could occur at summit--but unlikely
- Senate ratification hearings could take 6 months
  - Senate wants CFE Treaty ratified before turning to START
- START entry into force (EIF) before 1992 doubtful

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MANDATORY SSI: POTENTIAL IMPACTS

- [redacted] SRM production and test facility (b)(1) (b)(3)
  - for PK and SICBM. Precise geocoordinates fall on [redacted]
  - [redacted] Facility produces equipment for sensitive compartmented programs.
- [redacted] (b)(1) (b)(3)
  - Facility manufactures Titan IV fuel tanks, and interstage structures.
  - Sensitive government sponsored activities would be jeopardized by intrusive on-site inspection.
- [redacted] (b)(1) (b)(3)
- [redacted] SRM facility for PK and SICBM. (b)(1) (b)(3)
  - Tactical missile systems, NASP, and SDI activities.

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ASSESSMENT OF START IMPACT ON VANDENBERG AIR FORCE BASE

Impact

- Manageable
  - No declared facilities on South Vandenberg
  - Some concern over declared sites in North Vandenberg industrial area
  - Under INF, Soviets have visited Cape only three times

Potential concern

- Use of Vandenberg airfield for inspection teams
- Use of NRO facilities supporting Taurus launchers

Next steps

- NRO policy should be established on:
  - Testing interruptions
  - Payload and aircraft movement
  - The level of involvement by base and NRO personnel in inspections

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